

New Hampshire Occupational Health Surveillance Program: Fundamental Program
Grant #1U60OH009853-01
Annual Report of Major Accomplishments and Outcomes

NH Division of Public Health Services, Bureau of Public Health Statistics and Informatics
Performance Period: July 1, 2010 to June 30, 2011

Karla Armenti, ScD. – Principal Investigator
Tel: (603) 271-8425; Fax: (603) 271-7623
Email: karmenti@dhhs.state.nh.us

The overall objectives of the program are to:

- Establish the NH Occupational Health Surveillance Program (NH OHSP) within the Division of Public Health Services, Bureau of Public Health Statistics and Informatics
- Collect, analyze, and interpret surveillance data, addressing the utility and limitations of existing databases for collecting and analyzing occupational illnesses and injuries
- Develop new data sources and additional indicators
- Identify priority occupational safety and health conditions in the state
- Disseminate data on the magnitude of occupational injuries and illnesses
- Integrate activities with existing NH public health surveillance systems
- Work with occupational safety and health stakeholders to recommend prevention strategies and interventions

Major Accomplishments and Outcomes

The New Hampshire Occupational Health Surveillance Program (OHSP) was formally established in the Bureau of Public Health Statistics and Informatics in the Division of Public Health Services (DPHS) in August of 2010. Staff in the Bureau access existing public health administrative data sets in the state Enterprise Data Warehouse. In addition, survey data from the Behavioral Risk Factor Surveillance System (BRFSS), Department of Labor (DOL) workers' compensation data, poison center data and emergency medical services data were added for surveillance purposes.

Occupational Health Indicators

With the help of staff from the Bureau of Public Health Statistics and Informatics and an intern from the Department of Work Environment at UMASS Lowell, we completed a total of 16 (out of 20) occupational health indicators for 2007 and 2008 and submitted them to CSTE/ NIOSH. The biggest limitation with our ability to process the indicators is due to the fact that New Hampshire does not participate in the Bureau of Labor Statistics Survey of Occupational Injury and Illness system. As an alternative, we will be reporting out on modified indicators using the data we do have.

Initial data analysis on 6 to 8 year trends (2000/2002-2008) will be published in August 2011. Our analyses indicate priority areas to be occupational poisonings, hospitalizations for work related injuries, work related amputations (hospitalizations), and adult blood lead exposures. We will work with our stakeholders to ensure attention is focused on these key areas, and

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interventions are developed to raise awareness and prevent these exposures and risks. Further analysis of the data by geography and age/gender will be performed to focus our efforts.

Information Dissemination and Communication Activities

- Created new web page in DPHS: <http://www.dhhs.state.nh.us/dphs/hsdm/ohs/index.htm>
- Designed “One-Pager” description of our program and what we do, with some general stats on NH.
- Wrote Issue Brief on BRFSS State Added Questions on injuries at work (serious enough to warrant medical attention) and who paid for them – Now on our website.
- New Report on OHI’s to be published in August 2011; will include results from BRFSS Call-Back Survey on Work-Related Asthma, occupational poisonings, and workers’ compensation data (total, by body part, and causes of injury).

We are currently working on integrating our occupational health indicators into a new web-based query system, WISDOM (Web-based Interactive System for Direction and Outcome Measures), based on an Oracle platform using Cognos with live query/report making capabilities.

Enhancing the OHSP and Developing New Data Sources

Additional efforts to enhance existing data sources include adding industry and occupation questions to the 2011 BRFSS (with 3 months of pilot data in 2010), adding fields for industry and occupation to the poison center data; adding occurrence (at work) codes to the hospital discharge data set, and coding of occupation and industry in the ABLES data. We have also started exploring Department of Safety Emergency Medical Services data, and the NH Department of Labor workers’ compensation data. Finally, we have begun discussions with researchers at a national level on adding industry and occupation fields to the national hospital discharge data set.

Integrate Activities with Existing NH Public Health Surveillance Systems

- Adult Blood Lead Epidemiology and Surveillance Program (ABLES)
 - Interns from UNH and Keene State College performed analysis on lower BLLs (10 to 25 µg/dL) and conducted survey of workers to better understand exposures and protections in the workplace.
- Northern New England Poison Center - Occupational Poisoning Project
 - Added I/O fields to incoming call forms that are work-related; did training of personnel on importance of collecting I and O; ran data for June indicator report
 - Intern from George Washington University started project to link poison center data to hospital emergency room data (2005 to 2008) to better understand final outcomes of work related poisonings in the hospital discharge data. Results to be published in 2011 (peer reviewed article).
- Division of Vital Records Administration occupational mortality study in collaboration with NIOSH for the National Occupational Mortality Surveillance (NOMS) program (using NH data to populate NOMS).

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- Student intern from UMASS Lowell is doing her Capstone with us. We will publish a report on patterns of occupational mortality 2002 to 2007 in spring of 2012.
- Dartmouth Hitchcock Medical Center (DHMC) Electronic Medical Record Project
 - Identified and started working with a Resident from DHMC. Developed parameters for first project using Electronic Report of Injury (EROI) for employees. This will include: descriptive epidemiology on EROI data set (2009-2010), population characterization – compare to national data for this industry, possible linkage to employee health risk assessments. Timeline for Resident program is 18 months – ends June 20, 2012. Have established a relationship with Dartmouth Public Health Program to continue rotating students to work on this project over the next 4 years.

Work with Occupational Health Stakeholders to Explore Prevention Strategies

An advisory committee was established in September of 2010. Members (total of 54) include representatives of local government, labor, academia, business and industry, public health professionals, and private funders. A mission statement was created (“To promote safe and healthy workplaces for all people in New Hampshire”) and ideas were shared on how best to identify key issues of concern and where to target our limited resources.

In April of 2011, we had the great fortune of having APHA president, Dr. Linda Rae Murray, come to New Hampshire and speak at the New Hampshire public health Association's annual meeting. Since her background is occupational health we hosted a meeting of occupational health stakeholders for a one-on-one discussion with her. It was a highly successful interchange where the group received advice and recommendations from Dr. Murray on how to ensure success in working together to protect workers in New Hampshire.

Other Areas of Collaboration

- Worked with legal counsel at NH DPHS and the Department of Labor to establish MOU for OHSP staff to view workers' compensation data.
- Wrote educational piece to include with DPHS Bureau of Disease Control Lyme Disease Case Report Form on the importance of collecting occupation as part of the report.
- Coordinated 2 day training session on industry and occupation coding at the Northeast Regional Occupational Disease and Injury Surveillance Conference (to be held May 3 and 4). Fourteen people from various Northeast agencies are signed up, including CT OSHA staff, researchers from Drexel University and University of New Hampshire, and state surveillance staff.
- Principal Investigator is participating on the NH EQUITY Partnership's Data Committee focused on better data collection of race, ethnicity and language.

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Presentations

- CSTE Occupational Health Subcommittee meeting, “How to set up an Advisory Committee,” November 16, 2010, Austin, Texas
- APHA Annual Meeting, “2008 NH Behavioral Risk Factor Surveillance System: Estimating workplace injuries and workers’ compensation claims using a first-time supplement,” and “Methods and results of a NH study of unintended, workplace chemical exposures: Subsequent strategies for surveillance-based prevention using poison center data,” November 6-10, Denver, CO
- CSTE Occupational Health Subcommittee meeting, “Using state-wide EMS data for occupational health surveillance,” March 9 and 10 2011, Washington D.C.
- NIOSH Sponsored meeting on Work-Related Asthma, “Using state-wide EMS data for surveillance of work-related asthma,” Oakland, CA, March 21 to 24, 2011
- Northeast States Occupational Health Surveillance conference, “Using state-wide EMS data for occupational health surveillance,” May 2, 3, and 4 2011, Farmington, Connecticut.
- CSTE Annual Meeting, “Characterization of adult blood lead levels below 25 mcg/dL in the New Hampshire Adult Blood Lead Epidemiology and Surveillance (ABLES) Program,” and “Integrating industry and occupation into health and exposure surveillance: Industry and occupation coding,” June 12-16, Pittsburgh, Pennsylvania
- Invited Guest Lectures: Keene State College, Health Sciences course, Dartmouth Institute for Health Policy and Clinical Practice, Master of Public Health Program, Environmental and Occupational Health, and University of New Hampshire, Department of Health Management and Policy, College of Health and Human Services, Environmental Health Introduction course

Publications

“Using the 2008 NH Behavioral Risk Factor Surveillance System (BRFSS) to estimate the number of work-related injuries with associated payer,” Rishika Nigam, MPH, Susan Knight, MPH, Karla Armenti, ScD, and David Skinner, NH Division of Public Health Services, Concord, New Hampshire, June 2011, <http://www.dhhs.state.nh.us/dphs/hsdm/brfss/documents/wrinjuries2011.pdf>.

*DATA FACT SHEET NORTHERN NEW ENGLAND POISON CENTER , New Hampshire
Occupational Poisonings / 2007-2009*
http://www.mainehealth.org/workfiles/nnepc/Data_Fact_Sheets/NH_Occupational_Poisonings_2009.pdf